REMARKS

As a preliminary, Applicants and Applicants' representative thank the Examiner for the personal interview which was held on May 17, 2006.

Claims 1-34 are pending in the present application. Independent claim 1, and claims 2-12, 16-20, and 28-34 dependent directly or indirectly thereon, are directed to an optical film. Independent claims 13-15, and 21-27 dependent directly or indirectly thereon, are directed to a liquid crystal display.

In the Office Action, the following rejections are set forth:

- Claims 1-7, 11, and 18-20 are rejected under 35 U.S.C. 103(a) as obvious over JP61-32005 to Kato ("Kato") in view of JP 6-59123 ("Yoshimi");
- Claims 1, 6-7, 11, and 19-20 are also rejected under 35 U.S.C. 103(a) as obvious over US 6,111,697 to Merrill ("Merrill") in view of Yoshimi;
- Claims 8-10, 28, and 29 are rejected under 35 U.S.C. 103(a) as obvious over Kato and Yoshimi, further in view of US 6,498,633 to Ozeki et al. ("Ozeki");
- Claims 12, 16, and 21 are rejected under 35 U.S.C. 103(a) as obvious over Kato and Yoshimi, further in view of US 6,088,079 to Kameyama et al. ("Kameyama");
- Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as obvious over Kato and Yoshimi, further in view of US 6,654,085 to Koike ("Koike");
- Claims 32-34 are rejected under 35 U.S.C. 103(a) as obvious over Kato and Yoshimi, further in view of US 6,094,245 to Ochi et al. ("Ochi");
- Claims 13, 22 and 23 are rejected under 35 U.S.C. 103(a) as obvious over JP 11-64631 to Okumura ("Okumura") in view of Yoshimi;

- Claims 14-15, and 24-27 are rejected under 35 U.S.C. 103(a) as obvious over Okumura in view of Kato and Yoshimi.

It is alleged in substance in the Office Action that Kato, Merrill, and Okumura each disclose a polarizing plate with two polarizers, and that it would have been obvious to use the polarizers of Yoshimi having 99% polarization degree.

The rejections are respectfully traversed.

As a preliminary, contrary to the interpretation set forth on page 2, last paragraph of the Office Action, Yoshimi fails to disclose a polarizing film having a first portion and second portion. The rejections are respectfully traversed. Rather, Yoshimi discloses a conventional liquid crystal display with a front polarizer at the viewing side of the liquid crystal cell and a rear polarizer at the back of the liquid crystal cell, as shown in the Figures of Yoshimi.

Reference is made to the English translation of paragraph [0005] of Yoshimi which was submitted in the Remarks on page 8 of the paper filed April 30, 2004. A copy of this English translation of paragraph [0005] of Yoshimi is attached to this paper as a separate page for easy reference.

The correct translation of this passage shows that, in the machine-translation, the phrase "even if there are few polarization films" is erroneous, while an accurate translation of the passage is: "The present invention provides a polarizing plate including a transparent protective film **on at least one side of a polarizing film** and having a visible light transmittance of 35% of more..." (emphasis added.)

Thus, Yoshimi does not suggest a plurality of polarizers, but it only suggests applying a protective film or a plurality of protective films to a conventional single polarizing film. This is

confirmed by the Figures of Yoshimi, in which there is only one polarizing film (4) on each side of the liquid crystal cell (6), as is conventional in the art. Specifically, Figs. 1-4 of Yoshimi show a polarizing plate (4) having a single polarizing layer (2) with one or both sides covered by a protective layer (1) and/or phase contrast film (5), and Figs. 5-7 of Yoshimi show a liquid crystal cell (6) with polarizing plates (4) on both sides of the liquid crystal cell (6).

Reference is also made to the English translation of paragraph [0020] of Yoshimi which was submitted with the paper filed on January 13, 2005. A copy of this English translation of paragraph [0020] of Yoshimi is also attached to this paper as a separate page for easy reference.

In that passage, Yoshimi states: "As shown in the figures, required numbers of the polarizing plates and the retardation films can be combined suitably to apply to one or both surfaces of the liquid crystal cell." This sentence relates grammatically to the embodiments illustrated in the drawings, where a plurality of retardation plates is shown, but there is always only one polarizing plate on each side of the liquid crystal cell. Further, the common knowledge in the art is that one polarizing plate is provided on the visible side of the liquid crystal cell, another polarizing plate is provided on the backlight side of the liquid crystal cell, and the absorption axes of the two polarizing plates will cross at right angles to each other, so that providing two polarizing plates on one side of a liquid crystal cell is contrary to this common knowledge. As a result, the person of the art would read paragraph [0020] consistent with common knowledge, i.e., at most one polarizing plate on each surface of the liquid crystal cell, and would not find a suggestion or motivation to provide two polarizing plates on one side of the liquid crystal cell.

In summary, Yoshimi fails to teach or suggest a polarizing plate comprising a polarizer with laminated first portion and second portion as recited in the present claims.

Further, regarding Okumura, first, Okumura only suggests a polarizing degree of about 95%, and second, Okumura does not suggest a combination of two portions as in the present invention.

More specifically, Okumura only suggests a polarizing degree of "95% or more" (paragraph [0026] of Okumura). Further, in the "optimal example" (paragraph [0027] of Okumura), there are three polarizing layers and the polarizing degree is around or little more than 95%. Also, the person of the art would have known that it is generally difficult to increase the polarizing degree of a reflective polarizer of the type disclosed in Okumura beyond the values disclosed in Okumura. (This is in contrast to an absorptive polarizer of the type disclosed in Yoshimi, for example, in which Yoshimi discloses a higher nominal polarizing degree of 99% for its polarizing plate, although the values in Table 1 of Yoshimi are averaged over the visible wavelength range and not obtained at each wavelength.) Thus, based on the disclosure of Okumura, and in view of the expected costs and difficulties whereas the examples of Okumura are already "optimal," a person of ordinary skill in the art would not have been motivated to increase the polarizing degree to a much higher level, such as 99% or more, especially if such value would need to be reached at each wavelength.

Second, Okumura does not disclose any embodiment of its polarizer with two portions. In particular, "the optimal example" described in paragraph [0027] of Okumura and shown in Fig. 3 of Okumura has three reflective polarizing films. In addition, the reason why Okumura uses at least three reflective polarizing films is that each polarizing film provides specific color selective-reflecting in each of the red-green-blue wavelength ranges (see paragraph [0027] of Okumura). Therefore, a person of ordinary skill in the art would not have been motivated to

eliminate or modify one or several of the films, because that person would have found no guidance in Okumura as to whether or how the essential selective-reflecting function in the specific color range fulfilled by one of the polarizer films (for example, green, if the polarizing film 302 of Fig. 3 is concerned) could be replaced by expanding a wavelength range for the outside polarizer films 301 and 303.

In summary, Okumura fails to remedy the deficiencies of Yoshimi, because Okumura fails to teach or suggest a polarizing plate comprising a polarizer with laminated first portion to reach a polarization degree of 99% or more at each wavelength of light for wavelengths of 420 to 550 nm and second portion to reach a polarization degree of 99% or more at each wavelength of light for wavelengths of 550 to 700 nm, respectively.

Further, the other cited references Kato and Merrill also fail to remedy the deficiencies of Yoshimi and Okumura, because they are silent as to a polarizing film comprising two laminated portions.

In contrast, the present inventors have discovered that, by laminating a portion having a high polarization degree at the short wavelength side (420 nm to 550 nm) and a portion having a high polarization degree at the long wavelength side (550 nm to 700 nm), as recited in present claims 1 and 13-15, it is possible to obtain a polarizing plate having a high polarization degree at both the long and the short wavelength side. Thus, the presently claimed invention makes it possible, with a simple, efficient, and cost-effective optical construction, to solve a problem of the prior art in which a high polarization degree could not be obtained at either the long or the short wavelength side, as discussed in the introduction to the present specification.

In addition, with respect to the dependent claims, the combinations of features recited in

these respective claims are not taught or suggested in the cited references taken alone or in any combination. Therefore, for these respective reasons alone, the dependent claims are not obvious over the cited references taken alone or in any combination.

In particular, with respect to claims 19-20, it is submitted that the cited references are completely silent regarding the features recited in these respective claims (polarization degrees of 99.3% or more or 99.5% or more, respectively, at each wavelength of light for wavelengths of 420 to 550 nm for the first portion, and at each wavelength of light for a wavelengths of 550 to 700 nm for the second portion). Therefore, for these respective reasons alone, each of claims 19-20 is not obvious over the cited references taken alone or in any combination.

In view of the above, it is submitted that the rejections should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 50-2866.

Respectfully submitted,

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JP 6-59123 (Yoshimi)

PARTIAL ENGLISH TRANSLATION

Paragraph [0005]

[0005]

[Means for solving problem]

The present invention provides a polarizing plate including a transparent protective film on at least one side of a polarizing film and having a visible light transmittance of 35% of more, wherein a polarization degree P satisfies a formula: $P=\sqrt{\ }(\{Tp-Tc\} / \{Tp+Tc\}) \geq 0.990$ (wherein Tp denotes a parallel transmittance, and Tc denotes an orthogonal transmittance) and a dimensional change rate when being heated at 80°C is 0.3% or less; a polarizing plate in which at least one retardation plate is laminated on one side of the above-mentioned polarizing plate; and a liquid crystal display on which the polarizing plate is disposed on at least one side of the liquid crystal cell.

(Partial Translation)

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(54) [Title of the invention] **POLARIZING PLATE AND LIQUID CRYSTAL DISPLAY DEVICE**

P.3

[0020] A liquid crystal display device of the present invention is formed by disposing the above-mentioned polarizing plate on one or both surfaces of a liquid crystal cell. An example of the liquid crystal display device is shown in FIGs. 5-7. The numerals 4, 5 and 6 respectively denote polarizing plates, retardation films and a liquid crystal cell. As shown in the figures, required numbers of the polarizing plates and the retardation films can be combined suitably to apply to one or both surfaces of the liquid crystal cell. Similarly, two or more liquid crystal cells such as a combination of a cell for display and a cell for compensation can be used. The intersection angle between the absorption axis of the polarizing plate and the optical axis of the retardation film can be set arbitrarily, for example, in a range of 0 to 180 degrees.